

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
6 October 2005 (06.10.2005)

PCT

(10) International Publication Number
WO 2005/093409 A1

(51) International Patent Classification⁷: **G01N 33/483**

TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(21) International Application Number:
PCT/EP2005/003058

(22) International Filing Date: 22 March 2005 (22.03.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
04007388.4 26 March 2004 (26.03.2004) EP

(71) Applicant (for all designated States except US): **BRACCO IMAGING SPA** [IT/IT]; Via Egidio Folli 50, I-20134 Milano (IT).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **CALABI, Luisella** [IT/IT]; Bracco Imaging SpA, Via Egidio Folli, 50, I-20134 Milano (IT). **ALFIERI, Goffredo** [IT/IT]; Bracco Imaging SpA, Via Egidio Folli, 50, 20134 Milano (IT). **BIONDI, Luca** [IT/IT]; Bracco Imaging SpA, Via Egidio Folli, 50, I-20134 Milano (IT). **DEMIRANDA, Mario** [IT/IT]; Bracco Imaging SpA, Via Egidio Folli, 50, 20134 Milano (IT). **PALEARI, Lino** [IT/IT]; Bracco Imaging SpA, Via Egidio Folli, 50, I-20134 Milano (IT). **GHELLI, Stefano** [IT/IT]; Bracco Imaging SpA, Via Egidio Folli, 50, I-20134 Milano (IT).

(74) Agent: **POLETTI, Marco**; Via Egidio Folli, 50, I-20134 Milano (IT).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ,

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii)) for the following designation US
- of inventorship (Rule 4.17(iv)) for US only

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: METHOD FOR THE IN VITRO DETERMINATION OF CELLULAR UPTAKE OF EXOGENOUS AND ENDOGENOUS SUBSTANCES USING NMR SHIFT AGENTS AND THE MAGIC ANGLE NMR TECHNIQUE

(57) Abstract: The present invention relates to a method for the in vitro quantitative determination of cellular uptake of exogenous or endogenous substances which method comprises applying MAS-NMR spectroscopy technique to an in vitro cellular sample, in combination with a shift agent. The said method is particularly advantageous as it find general applicability for a variety of substances and cell samples.

WO 2005/093409 A1